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REMARKS/ARGUMENTS

In reply to the final Office Action mailed December 27, 2007, Applicants respectfully request reconsideration and allowance. In the Office Action all of the elected claims 1-9 and 30-38 in the application have been rejected for anticipation and obviousness. Applicants have amended claims 1 and 30, herein. Claims 10-29 have been withdrawn. Claims 1-9 and 30-38 remain pending.

Applicants have amended claims 1 and 30 to recite the "polymer holding the acid component in place in the composition." Support for this amendment is found at page 6, lines 2-3 in the original disclosure. No new matter is added.

Claims 1-7 have been rejected for anticipation under 35 U.S.C. § 102(b) and in the alternative for obviousness under 35 U.S.C. § 103(a) over U.S. Patent 4,714,611 (Aumuller I) and U.S. Patent 5,914,360 (Aumuller II). The Office Action contends that the Aumuller patents teach formation of N, N'-bridged bistetramethylpiperidinyl compounds, with an acidic catalyst that would be present in the final product when it is used to stabilize a polymer. The Office Action also points out that the formation of the N, N'-bridged bistetramethylpiperidinyl compounds may be conducted in the presence of a solvent that can be polyethylene glycol. The Aumuller patents do not teach that the polymer holds the acid component in place in the composition as recited in the claims. The Office Action contends that the acidic catalyst may at some point be in the presence of a polymer by inherency. To establish inherency, it must be "clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." CONTINENTAL CAN CO. USA, INC. v. MONSANTO CO., 20 USPQ2d 1746, 149-50 (Fed. Cir. 1991). Possibility is not enough to establish necessity. "Inherency does not embrace probabilities or possibilities." TRINTEC INDUS., INC. v. TOP-U.S.A. CORP., 63 USPQ2d 1597, 1601 (Fed. Cir. 2002).

Applicants submit there is no indication that the acidic catalyst is held in place by the polymer in the Aumuller patents. Applicants respectfully submit that both the catalyst and the polymer are separated from the compound and each other after the N, N'-bridged

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bistetramethylpiperidinyl compound is produced. When describing similar prior art preparations of compounds, the Aumuller patents teach "many byproducts are formed and necessitate expensive purification." Aumuller II, col. 2, lines 26-28. This teaching indicates that the solvent and the acidic catalyst would be separated from the product compound. Aumuller II also explains that these compounds are used for light stabilizers and stabilizers for organic material. Col. 2, lines 11-14. Acid catalysts and solvents do not typically stabilize substances to which they are added, particularly organics, and would be removed from the N, N'-bridged bistetramethylpiperidinyl stabilizer compound before the compound would be added to a polymer to be stabilized. Moreover, catalysts are typically separated from other reaction components to preserve the catalyst for reuse. The same can be said for solvents. Applicants respectfully submit that the teachings of the Aumuller patents do not necessitate a composition of acidic catalyst and polymer, let alone a composition in which the polymer holds the acidic catalyst in composition as recited in the claims. Applicants respectfully request withdrawal of the rejection of claims 1-9 and 30-38 for anticipation and obviousness.

The rejection also contends that claims 7-9 are also obvious over the Aumuller patents because they disclose that the catalyst can be present in an amount up to 25 mol %. Applicants respectfully traverse this rejection. The catalyst concentration in the reaction for making the N, N'-bridged bistetramethylpiperidinyl product is no indication as to how much of the catalyst would be in the final product. The catalyst concentration in the final product will be significantly less than in the reaction mixture, and Applicants respectfully submit that it will be essentially zero after product purification before its use as an organic stabilizer. Additionally, the patents further read, "Increasing the amount of catalyst to above 25 mol % has no adverse effect on the reaction but offers no further advantages." Aumuller II, col. 6, lines 24-25. This statement teaches one of ordinary skill away from using higher concentrations of catalyst in the reaction mixture. Catalyst costs money and it is typically removed from the reaction product. One of ordinary skill would not add more catalyst than necessary for the reaction without any benefit so as not to waste money on additional catalyst supply and on additional product purification processing required to

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remove more catalyst from the product. Applicants respectfully submit that claims 7-9 are not obvious over the teachings of Aumuller I and II.

Claims 1 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by WO 01181436 A1 (Hlatky). The rejection contends Hlatky disclose a polymerization process performed in the presence of an ionic liquid. However, Example 2 of Hlatky reveals "polyethylene, the expected reaction product, collects on the surface of the ionic liquid and is easily isolated." Page 10, lines 24-25. Applicants respectfully submit that the two components, the polymer and the ionic liquid, are separate entities, and not a single composition as claimed. Applicants further respectfully submit that the polymer does not hold the acid component, in this case, the ionic liquid, in place in the composition as claimed. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 5 for anticipation.

Claims 1, 7-9, 37 and 38 were rejected under 35 U.S.C. § 102(b) for anticipation by U.S. Patent 2,258,368 (Stevens). Stevens discloses an isobutylene extraction method whereby contacting isobutylene with sulfuric acid and warming the solution produces polymerization. However, this is not polymerization as typically understood by one of ordinary skill. Only dimers and trimers are made. Isobutylene "can be polymerized into the dimer, di-iso-butylene; and the trimer, tri-iso-butylene." Stevens, page 1, col. 1, lines 43-45. The product "is a mixture of polymers consisting mostly of di-iso-butylene with a less[er] amount of tri-iso-butylene. In addition, there is some unchanged iso-butylene evolved." Stevens, page 1, col. 2, lines 28-31. The term "polymer" typically refers to multiple repeating monomeric units, not to dimers and trimers, which are considered oligomers, because they only have two and three monomeric units, respectively. The di-iso-butylene and tri-iso-butylene are excellent motor fuel components. See, Stevens, page 1, col. 1, lines 46-55. The product dimers and trimers form as a liquid, also atypical of polymers which are typically solid. See, Stevens patent, page 2, col. 1, lines 41-43. Applicants respectfully submit that the motor fuel polymer is not the typical polymer and is not the type of polymer recited in the claims as would be understood by one of ordinary skill in the art. Applicants respectfully submit that one of ordinary skill in the art would

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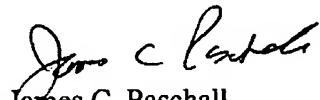
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more than understand this difference between motor fuel dimers and trimers in Stevens and the polymer recited in the claims.

Moreover, as referenced, the Stevens patent teaches: "As the polymer is formed it separates from the acid solution, forming a supernatant liquid layer floating on the acid." Stevens, page 2, col. 1, lines 41-43. Applicants respectfully submit that the two components, the mixture of dimers and trimers and the acid, are separate entities, and not a single composition as claimed. Applicants further respectfully submit that the polymer does not hold the acid component in place in the composition as claimed because the acid and the mixture of dimers and trimers develop as two liquids with the dimer and trimer product on top of the acid. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 7-9, 37 and 38 for anticipation.

For the foregoing reasons, Applicants respectfully request reconsideration and allowance of all of the claims 1-38 pending in the subject application. The Examiner is invited to contact the undersigned if these remarks are not sufficient to place the application in a condition for allowance.

Respectfully submitted,


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